

Briefing: Whale Entanglements in the Coastal Dungeness Crab Fishery

Fish and Wildlife Commission Meeting – January 12, 2019

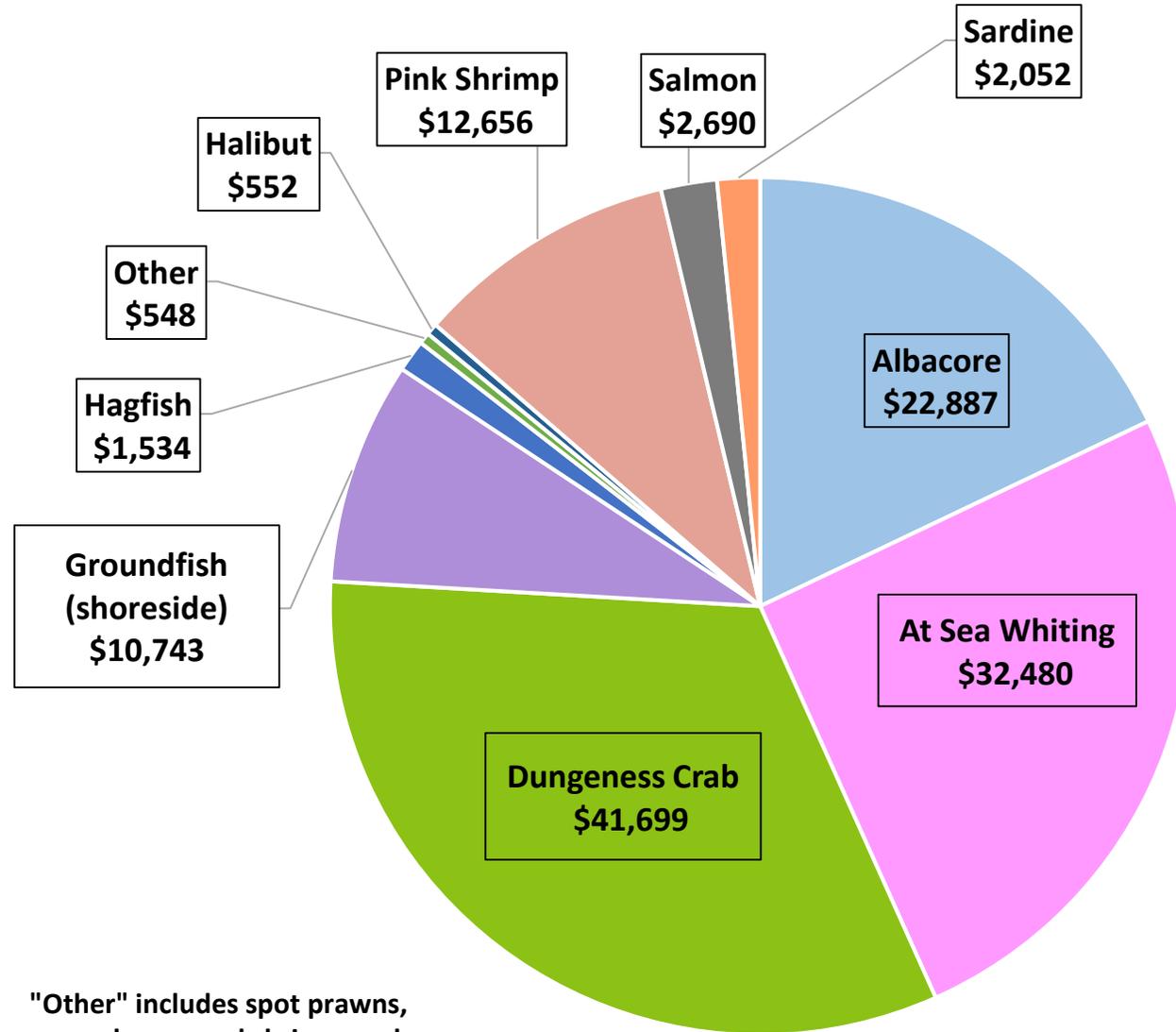


Michele Culver and Heather Hall
Intergovernmental Ocean Policy

Overview

- **Washington Coastal Dungeness Crab Fishery Overview**
- **NOAA Summary of Large Whale Entanglements**
- **Status of Whale Populations Encountered in Washington Fisheries**
- **WDFW Steps Taken to Address Whale Entanglements in Washington Coastal Dungeness Crab Fishery**
- **Proposed Next Steps**

WA Coastal Fisheries Ex-Vessel Revenue 2013-2017



"Other" includes spot prawns, razor clams, sand shrimp, and coastal pelagic finfish

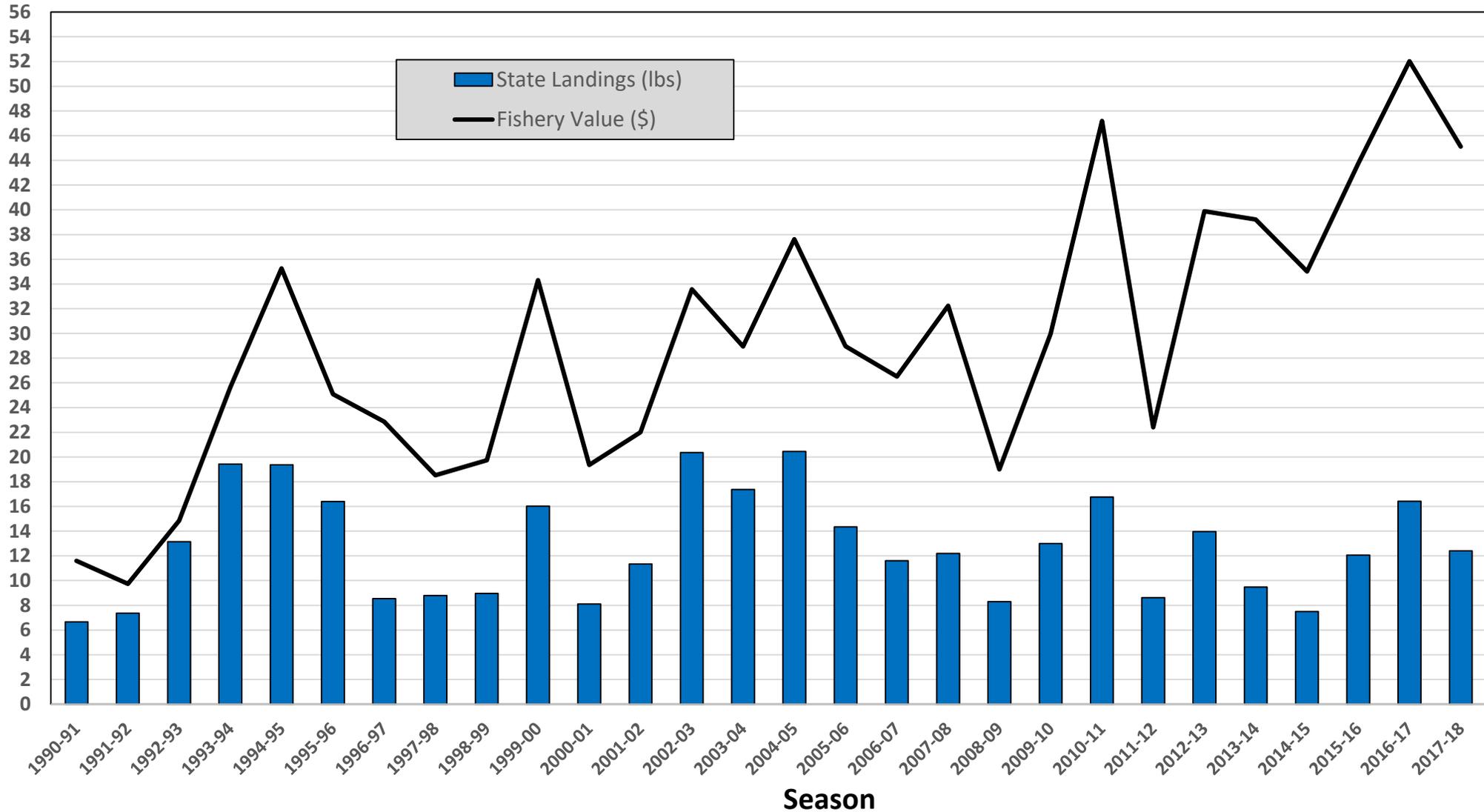
Coastal Dungeness Crab Fishery

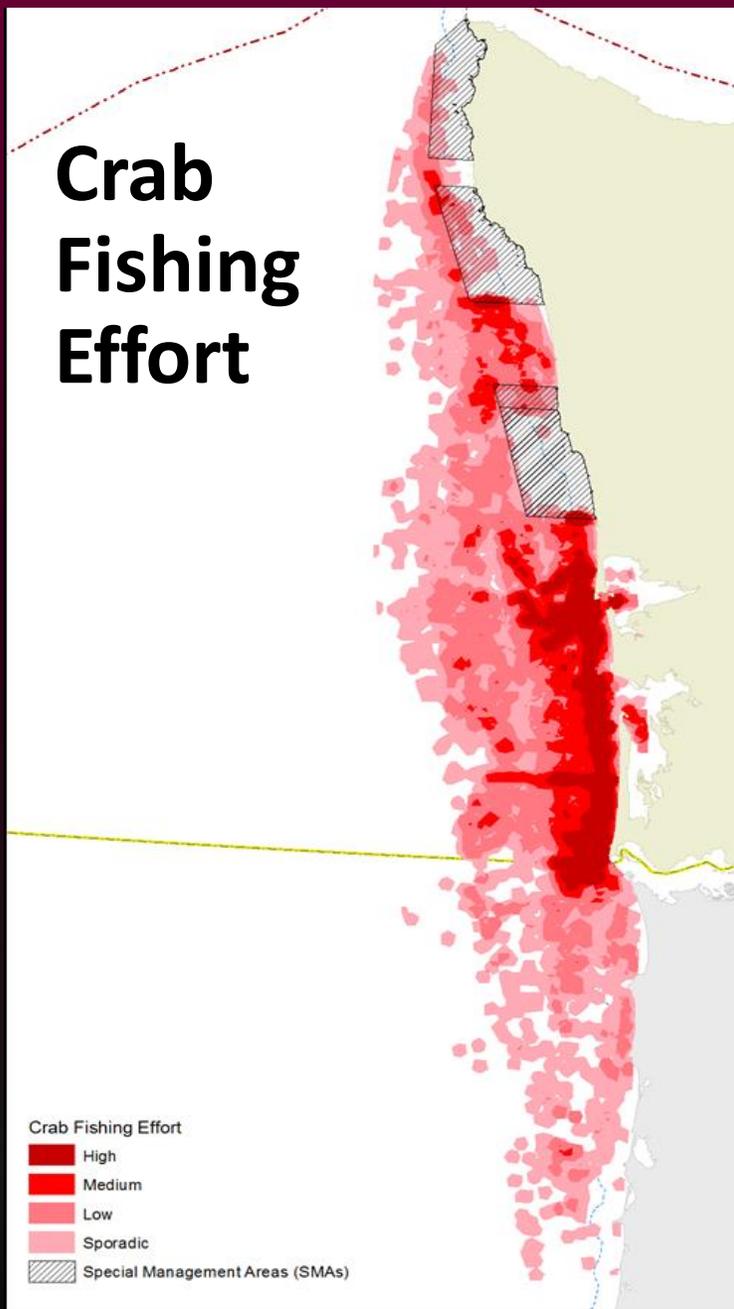


- **Magnuson-Stevens Act Delegated Management Authority to West Coast States**
- **Coordinate with OR and CA with Tri-State Agreement**
- **Limited Entry: 223 Licenses, 200 Active**
- **Maximum Vessel Length is 99 Feet**
 - **Each License Can Increase by 10 Feet Based on the Length as of July 2006**
- **Pot Limit: 300 or 500 Based on Historical Landings**
- **Pot Limit Enforced with Individual Buoy Tags**

Coastal Dungeness Crab Landings

Millions





- **Mandatory Logbook**
- **Fishery Typically From 5 to 60 fms**
- **Season*: Dec 1 - Sep 15**
- **Majority of Catch Taken in First Two Months of Season**
- **New Live Markets for Crab Increase Ex-Vessel Value**

*Opening Dates for Areas are Subject to State/Tribal Agreements and Tri-State Agreement and Contingent Upon Shell Condition and Domoic Acid Test Results



Understanding NOAA Terms

- **Reports and Confirmed Reports**

Reports of entanglement sightings; there may be multiple reports of a single event



- **Confirmed Entanglements**

Entanglements confirmed by a NOAA-trained responder

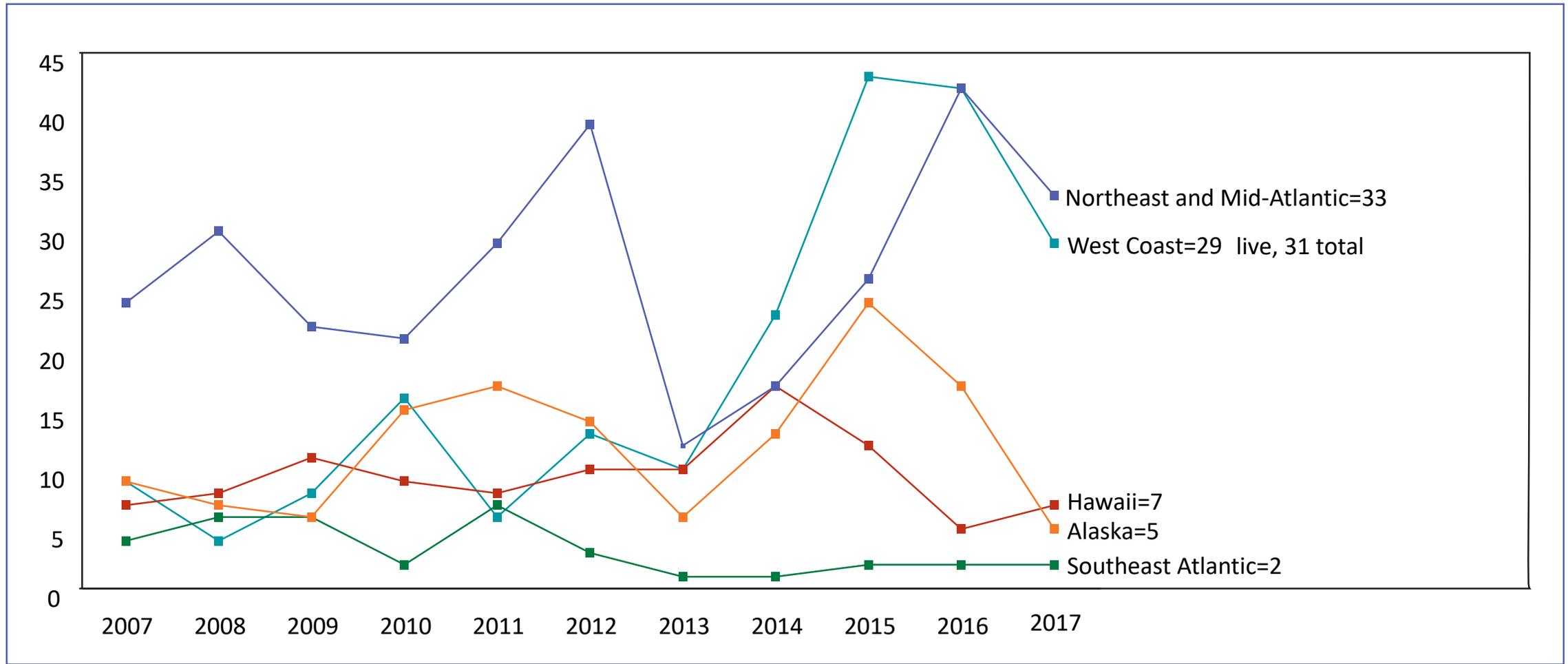
- **Geographic Attribution**

Where the entanglement was reported or confirmed, but not necessarily where the entanglement occurred

- **Fishery-Specific Confirmed Entanglements**

Entanglements that allow for specific gear identification

Confirmed large whale entanglements by region, 2007-2017

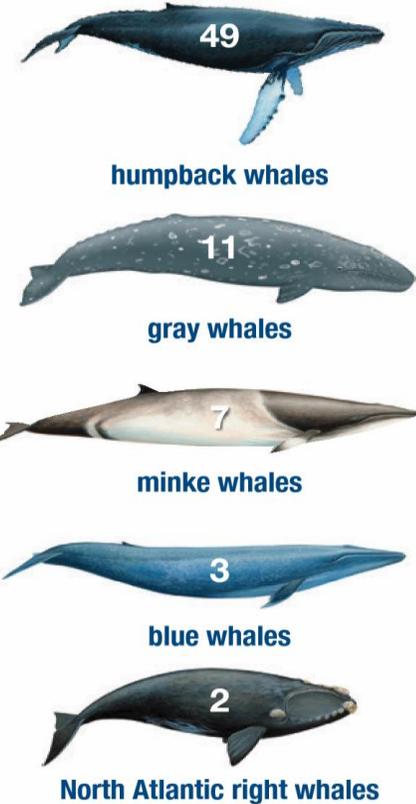


Source: NOAA 2017 West Coast and National Reports on Large Whale Entanglements

Table 1: The number of confirmed entanglements in 2017 and the 10-year average number of entanglements for each large whale species

Species	Confirmed Entanglements in 2017	10-Year Average (2007-2016)
Humpback Whale	49	47.6 ± 19.5
Gray Whale	11	6.3 ± 4.2
Minke Whale	7	5.0 ± 1.5
Blue Whale	3	0.4 ± 0.9
North Atlantic Right Whale	2	4.6 ± 2.6
Unidentified Whale	2	2.1 ± 1.8
Fin Whale	1	2.9 + 1.5
Sei Whale	1	0.3 + 0.5
Bowhead Whale	0	2.1 + 1.8
Sperm Whale	0	0.4 + 0.9

Five most frequently entangled large whale species in 2017:

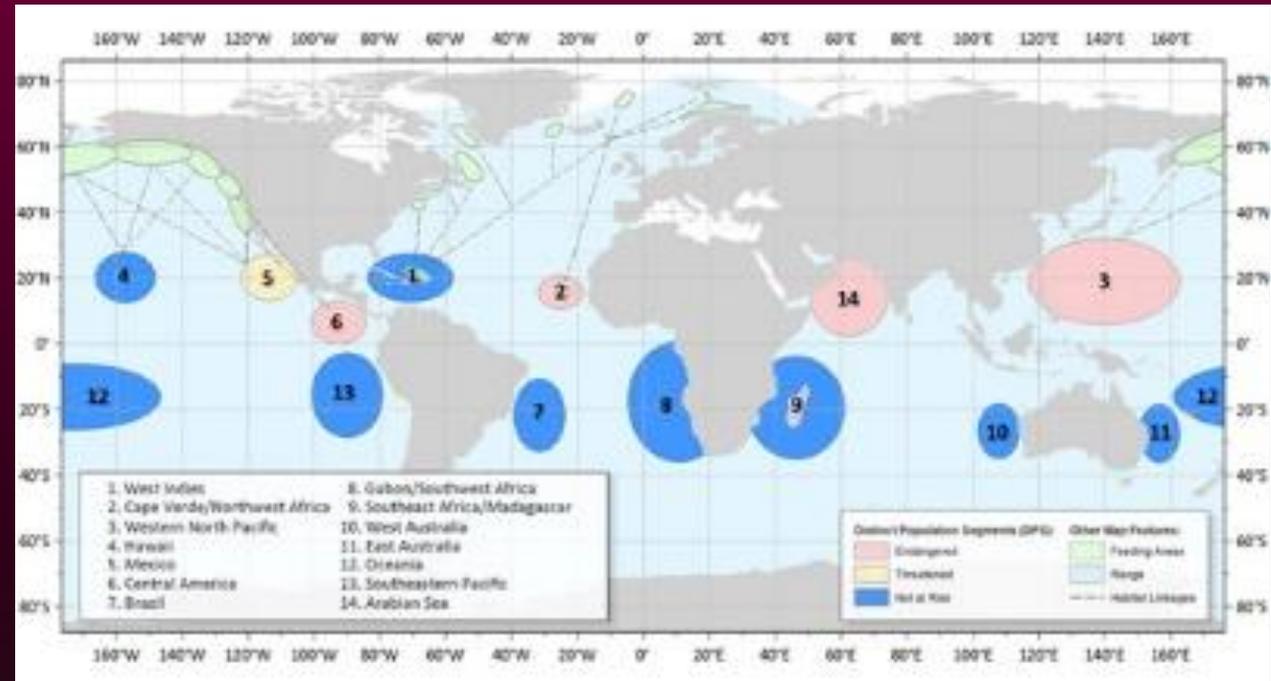


The outcomes of all confirmed 2017 entanglement cases			
Outcome	No Response	Response Initiated	Total
Full or Partially Disentangled	1	20	21
Self-Release	2	2	4
Presumed Alive/ Entangled	21	24	45
Dead	2	4	6
Total	26	50	76

Source: NOAA 2017 National Report on Large Whale Entanglements, November 2018.

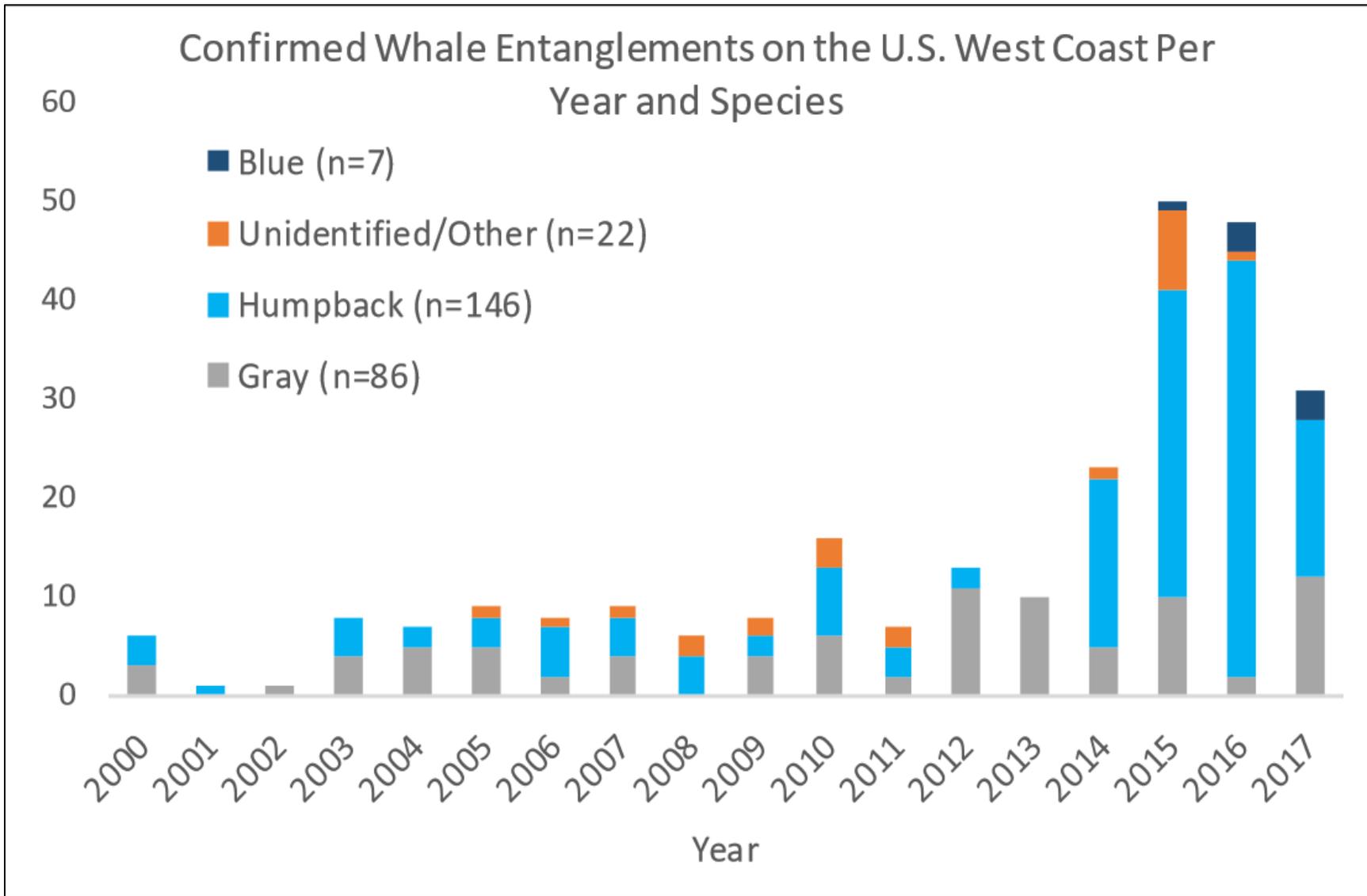
Humpback Whale Distinct Population Segments

- ESA Listed in 1970
- **14 Distinct Population Segments**
 - 4 in northern Pacific waters
 - Of those, 2 off West Coast
- **Status Changes in October 2016:**
- **Mexico DPS – Threatened**
 - Feeds across a broad range from California to Aleutian Islands
 - Occur off Washington primarily in summer
- **Central America DPS – Endangered**
 - Feeds almost exclusively off California and Oregon



Whale Entanglements in West Coast Fisheries

- **2000-2013: West Coast average ~ 10 confirmed per year**
- **Increased to 50 confirmed cases in 2015, 48 in 2016, 31 in 2017, and ~37 in 2018**
- **Increases attributed to:**
 - **Increasing whale populations**
 - **Changes in fishing effort distribution**
 - **Changes in patterns of distribution and movement of whales**
 - **Increased public awareness**
- **West Coast fisheries include: gillnets, and traps for sablefish, spot prawns, spiny lobster, and crab**

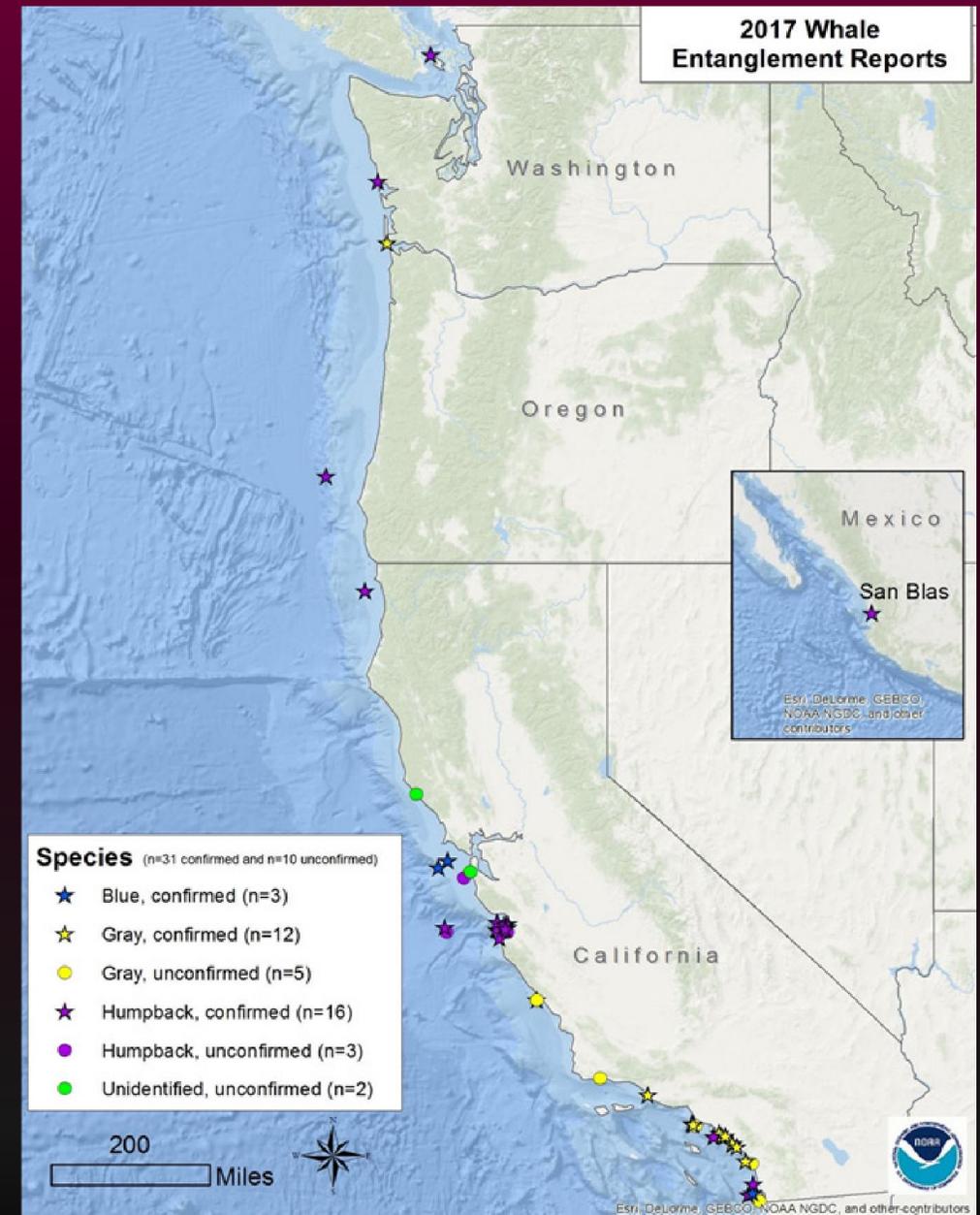


Source: NOAA 2017 West Coast Report on Large Whale Entanglements, May 2018

Confirmed Whale Entanglements

	2017	2018*
West Coast Total (All Fisheries)	31	37
WA Coastal Crab Fishery	2 humpback 1 gray	1 humpback 3 gray
Tribal Coastal Crab Fishery		1 humpback

* Source: NOAA preliminary report, through November 2018



Management Considerations



Whale Presence

- **Shifting distribution of whales off the West Coast**
- **Varying environmental conditions influence distribution of prey**
 - **Krill is more readily available along shelf break (~ 100 fms)**
 - **Small fishes, such as anchovy, closer to shore and in estuaries**

Fisheries

- **Whale interactions difficult to estimate and predict**
- **May not be “one size fits all” solution (e.g., gear regulations)**

Management Response



- **Established Whale Working Group** comprised of stakeholders and fishery managers
- **Stakeholder gear workshops and NOAA forensic analysis of gear that entangled whales**
- **Distribution of “Best Practices Guide” and vessel placards**
- **Notified NOAA of intent to apply for Incidental Take Permit under Section 10 of the Endangered Species Act (ESA)**

Proposed Next Steps

- **Work with NOAA on data and analysis for ESA Incidental Take Permit application**
 - **NOAA Office of Protected Resources in Long Beach, CA – lead**
- **Coordinate with Co-Managers**
 - **Continue dialogue on scope of ESA Take Permit**
- **Spring 2019 Workshops**
 - **Discuss potential actions to avoid and reduce whale interactions, including gear changes, time and area closures, and electronic monitoring requirements**
- **Develop and Propose Regulatory Actions through Fish and Wildlife Commission process**
 - **Target 2020-2021 Crab Season**

Questions?